

REMARKS

Claims 1-3, 8-11, 18, 19-21, 26-29, 36, 37-39, 44-47, 54, 55, 59, and 63 are rejected as anticipated by Southgate. Claims 4, 5, 22, 23, 40, and 41 are rejected as obvious in view of Southgate. Claims 6, 7, 12-14, 24, 25, 30-32, 42, 43, and 48-50 are rejected as obvious over Southgate in view of Crow. Claims 15-16, 33-34, and 51-52 are rejected as obvious over Southgate, Crow, and Gordon. Claims 17, 35, and 53 are rejected as obvious over Southgate and Gordon.

The Abstract is objected to as containing more than 150 words. The Abstract has been amended above to contain fewer than 150 words.

In view of the amendments and the Remarks, the Applicant respectfully requests allowance of the pending claims.

Rejections under 35 U.S.C. §102

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983). For a process, anticipation requires identity of the claimed process and a process of the prior art. The claimed process, including each step thereof, must have been described or embodied, either expressly or inherently, in a single reference. *Glaverbel S.A. v. Northlake Mkt'g & Supp., Inc.*, 45 F.3d 1550, 33 USPQ2d 1496 (Fed. Cir. 1995). Those elements must either be inherent or disclosed expressly. *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 7 USPQ2d 1057 (Fed. Cir. 1988). Those elements must also be arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

Rejections under 35 U.S.C. § 103(a)

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference(s) or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the

claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991); M.P.E.P. § 2143.

The Supreme Court recently reaffirmed use of the *Graham* factors for determining obviousness under 35 U.S.C. § 103(a). *KSR Int'l Co. v. Teleflex, Inc.* (*KSR*), No 04-1350 (U.S. Apr. 30, 2007). The four factual inquiries under *Graham* require examination of: (1) the scope and content of the prior art; (2) the differences between the prior art and the claims in issue; (3) the level of ordinary skill in the pertinent art; and (4) the objective evidence of secondary consideration. *Graham v. John Deere (Graham)*, 383 U.S. 1, 17-18, 149 USPQ 459, 467 (1966); 35 U.S.C. § 103.

In *KSR*, the Supreme Court recognized that the requirement for a teaching, suggestion, or motivation to modify or combine the references and arrive at the claimed invention provides a helpful insight for determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a). *KSR* at 14, 15. In addition, the Court maintained that any analysis supporting a rejection under 35 U.S.C. § 103(a) should be made explicit, and that it is "important to identify reasons that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed, because "inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *Id.*

Independent Claims 1, 19, 37, 55, 59, and 63

Claims 1, 19, 37, 55, 59, and 63 stand rejected as anticipated by Southgate. The Applicant respectfully traverses the rejections.

Claim 1 is directed to a method for integrating multiple images that can be transmitted to and played back on, for example, a set-top-box (STB). In a content-on-delivery environment, a short video clip as well as an Interactive Program Guide (IPG) need to be delivered to a user's STB. Application at [0044]-[0050]. For an IPG to be effective, each subscriber should be able to navigate within the IPG without interfering with other users. Application at [0046]. Because a STB may only have one decoder and very limited processing power, individually customized content, such as an IPG, should arrive complete and compressed. Application at [0050]. Rendering and replacing a portion of the screen when there are hundreds or thousands of users

would be extremely expensive and take enormous computing power. Application at [0053]. Thus, individual customization of content before compression is infeasible on a large scale. Application at [0054]-[0056].

Video sent to a STB may be compressed using techniques such as MPEG-2 and MPEG-4, which can use quantization and motion prediction to encode video. Application at [0059]-[0070]. Motion estimation and compensation are problematic in combining a video with a menu because the combining process will change the reference values used for prediction by the video compressor. Application at [0071]. The mismatch of reference values used by the compressor and the decompressor, such as in a STB, can cause image corruption. Application at [0071]-[0078].

Claim 1 provides a solution to the aforementioned problems by constraining the prediction process used during compression to preclude the use of information outside a restricted region, and recites in relevant part:

receiving at least the first image;

forming a first compressed image restricted to a first region of a first image area by representing at least one segment of the first image within the first region with a reference to another segment of the first image within the first region, thereby preparing the first image for integration with at least the second image.

The Applicant respectfully asserts that claim 1, when properly understood, is clearly allowable over the cited portions of Southgate.

For example, to support a rejection of claim 1, the Office Action alleges that Southgate discloses:

forming a first compressed image restricted to a first region of a first image area by representing at least one segment of the first image within the first region with a reference to another segment of the first image within the first region, thereby preparing the first image for integration with at least the second image (see [column 1 lines 33-36] for one or more active windows on the display where "one" represents a first and "more" represents at least a second or additional images; see also [figure 8], [figures 12A-12C], [figures 13A-13C], [figures 15A-C], [figures 16A-16B], [column 1 lines 52-64], [column 7 lines 44-55], [column 11 lines 51-63] where a window can be resized (compressed), thus restricted to a region

within the original window area). (Emphasis added).

Southgate at Col. 1, lines 20-50 only discloses:

While GUIs may vary from operating system to operating system and from application program to application program, there are basic components in contemporary GUIs that find themselves in virtually all GUIs. Most popular GUIs use a "mouse and windowing" environment where the user interacts with the computer by using a pointer displayed on the screen and manipulated by a hand held "mouse" input device. Information is displayed to the user within windows that are rectangular areas on the screen containing text or graphics related to the operation of an application program or an operating system. Other characteristic features common in GUIs are icons, menus, etc.

A "window" is the central way to provide information to, and receive information from, a user. There are usually one or more active windows on the display screen at any given time. Each window conveys information about an application program or other process executing in the computer. There may be multiple windows for a single application program or process where each window is used to convey different types of information. There can be multiple views of the same information such as two text windows showing overlapping portions of the same document. Typically, the computer system displays information within the window and accepts information from the user, sometimes in the form of special windows called "dialog boxes". The user often has some control over the existence, placement and size of a window and sometimes can even control the amount and type of information conveyed by the window. For a more detailed discussion of the use of windows in typical computer systems, see, e.g., "Microsoft Windows Version 3.1 User's Guide," by Microsoft, Inc.

The above-cited language is directed to a graphical user interface (GUI) windowing system, not to a method for forming a first compressed image restricted to a first region of a first image area, as recited by claim 1.

Figure 8 of Southgate only discloses:

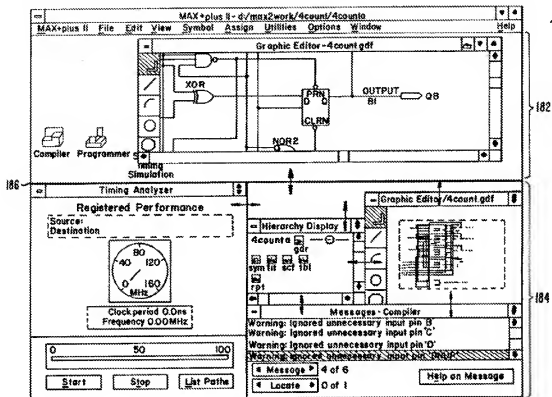


FIG. 8.

Figure 8 of Southgate is similarly directed to a GUI windowing system, not to a method for forming a first compressed image restricted to a first region of a first image area as recited by claim 1. Further, the user device of Southgate relies on significant processing power to create a windowing GUI, whereas the restricted region compression method of claim 1 can be used to form interactive content, such as video clips with IPGs, that can be played back on a device with very limited processing power.

The Applicant would like to emphasize that while Southgate is directed to a windowing system for a GUI, it has nothing whatsoever to do with integrating images using restricted region compression as recited in claim 1. Resizing or repositioning windows in a GUI, as understood by one of skill in the art, has nothing whatsoever to do with compressing images, such as by MPEG-2 or MPEG-4 encoding, as discussed in the Application.

Accordingly, in view of the discussion above, claim 1 is allowable for at least the reason that the cited language from Southgate clearly does not disclose forming a first compressed

image restricted to a first region of a first image area, as recited by claim 1.

Independent claims 19, 37, 55, 59, and 63 also recite forming a first compressed image restricted to a first region of a first image area, and so are allowable for at least the reasons given for the allowability of claim 1.

Dependent Claims 2-3, 8-11, 20-21, 26-29, 36, 38-39, 44-47, and 54

Claims 2-3, 8-11, 20-21, 26-29, 36, 38-39, 44-47, and 54 are allowable for at least the reason that each depends from an allowable claim, and for at least the reason that the cited language fails to disclose every element of each claim.

Dependent Claims 4, 5, 22, 23, 40 and 41

Claims 4, 5, 22, 23, 40 and 41 are allowable for at least the reason that each depends from an allowable claim, and for at least the reason that the cited language fails to disclose every element of each claim.

Dependent Claims 6, 7, 12-14, 24, 25, 30-32, 42, 43, and 48-50

Claims 6, 7, 12-14, 24, 25, 30-32, 42, 43, and 48-50 are allowable for at least the reason that each depends from an allowable claim, and for at least the reason that the cited language fails to disclose every element of each claim.

Dependent Claims 15-16, 33-34, and 51-52

Claims 15-16, 33-34, and 51-52 are allowable for at least the reason that each depends from an allowable claim, and for at least the reason that the cited language fails to disclose every element of each claim.

Dependent Claims 17, 35, and 53

Claims 17, 35, and 53 are allowable for at least the reason that each depends from an allowable claim, and for at least the reason that the cited language fails to disclose every element of each claim.

CONCLUSION

In view of the Remarks, each of the presently pending claims in the Application is believed to be in immediate condition for allowance. A Credit Card Payment authorizing payment in the amount of \$525.00, representing the fee for a small entity under 37 C.F.R. § 1.17(a)(3) for a Three Month Extension of Time is enclosed. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,
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